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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,787	10/29/2003	Nancy Anne Federspiel	6616-72707-02	1171

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One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, OR 97204

EXAMINER

IBRAHIM, MEDINA AHMED

ART UNIT	PAPER NUMBER
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1638

MAIL DATE	DELIVERY MODE
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09/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/697,787	Applicant(s) FEDERSPIEL ET AL.	
	Examiner Medina A. Ibrahim	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-7, 11 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-7, 11 and 13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's response to the advisory action of 04/21/02 is entered. The terminal disclaimer filed on 06/24/08 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/512,600 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Upon further search and consideration, it has been determined that the finality of the rejection be withdrawn. Any inconvenience this may have caused Applicant is regretted.

Claims 3-7, 11, and 13-16 are pending and are examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3, 5-7, 13-14, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is repeated for the reasons of record as set forth in the last Office actions. Applicant's arguments filed 03/29/07 have been fully considered but are not deemed persuasive.

The claims are drawn to a transgenic plant comprising a plant transformation vector comprising a nucleotide sequence that encodes a PRDT polypeptide comprising

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an amino acid sequence having at least 95% sequence identity to SEQ ID NO: 2 or an Arabidopsis ortholog of SEQ ID NO: 2 having at least 85% sequence identity to SEQ ID NO: 2 and comprising a SANT domain and has DNA-binding activity.

Applicant describes a transgenic plant comprising a vector comprising a nucleotide sequence encoding SEQ ID NO: 2, and a method of increasing drought/disease resistance activity by introducing into plant/plant cells the nucleic acid sequence of SEQ ID NO: 1, and plants and plant parts produced by said method. Applicant also discloses SEQ ID NO: 13, also from Arabidopsis, having drought resistance activity but has no disease resistance activity upon expression in a transgenic plant (see the declaration of John Davis of 09/07/06).

Applicant has not described the composition and the structure an Arabidopsis ortholog having at least 90% or 85% sequence identity to SEQ ID NO: 2 comprising a SANT domain and having DNA binding activity. No information is provided as to which of the 15% may vary from SEQ ID NO: 2 and retain function, and no structure and function correlation has been described. The specification (on paragraph 0015) states that the SANT domain is located at amino acids 8 to 60 of SEQ ID NO: 2. Applicant asserts that SEQ ID NO: 13 is an example of the Arabidopsis ortholog of SEQ ID NO: 2. However, the sequence search results of SEQ ID NO: 2 and 13 show that SEQ ID NO: 13 neither has at least 85% sequence identity to SEQ ID NO: 2 nor possesses a SANT domain. Therefore, the specification fails to describe structural features common to all Arabidopsis sequences having at least 90% or 85% sequence identity to SEQ ID NO: 2 and having PRDT activity. Consequently, the claimed transgenic plants and method that

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employs a nucleic acid encoding an Arabidopsis ortholog PRDT1 having at least 85% or 90% sequence identity to SEQ ID NO: 2 and a method of producing said transgenic plants are not adequately described. Given this lack of written description, the specification fails to sufficiently describe the claimed invention in such full, clear, concise, and exact terms that a skilled artisan would recognize that Applicant was in possession of the invention as broadly claimed at the time of filing.

Therefore, weighing all factors above, the claimed invention does not meet the current written description requirements. See, also Written Description Examination Guidelines published in Federal Registry/Vol. 66, No.4/Friday, January 5, 2001/Notices).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 3-7, 11 and 13-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Federspiel et al (WO 03/091412 A2, filed 04/24/03 and has priority date 04/24/02, to provisional application 60/375, 333). The instant application claims benefit to provisional application 60/482076, filed 06/24/03. In Applicant's response of 10/16/07, inventors Nancy Anne Federspiel, Allan Lammers, Xing Liang Liu, Stanley R. Bates, Christina Westerlund, and Jonathan R. Fitch were deleted. Therefore, the instant application and the WO 03/091412 have no common inventors.

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The claims are drawn to a transgenic plant comprising a plant transformation vector comprising a nucleotide sequence that encodes SEQ ID NO: 2 or an Arabidopsis ortholog having at least 85% sequence identity to SEQ ID NO: 2 and having SANT domain and DNA binding activity; and a method of increasing drought tolerance in a plant by transformation of the plant with said plant transformation vector and a plant produced by said method and plant part thereof.

Federspiel et al teach a transgenic plant comprising a plant transformation vector comprising a nucleotide sequence that encodes SEQ ID NO: 2; a method of increasing pathogen resistance in a plant by transforming plant cells with said plant transformation vector to produce transformed plant cells, and regenerating transformed plants having resistance to pathogens; and a plant produced by said method and plant part thereof. The cited reference also discloses SEQ ID NO: 13 as an Arabidopsis ortholog of SEQ ID NO: 2. Federspiel et al do not explicitly teach transgenic plant having drought tolerance activity by SEQ ID NO: 2 or 13, however, it is an inherent property of the transgenic plant expressing SEQ ID NO: 2 or 13.

MPEP § 2112 states [T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new to the discoverer." *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). The MPEP further states [t]here is no

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requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003).

Remarks

No claim is allowed.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Medina A. Ibrahim whose telephone number is (571)272-0797. The examiner can normally be reached on M-TH 8:00 am to 5:30 PM, and every other Friday from 8:00 AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on 571-272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAI
9/15/2008

/Medina A Ibrahim/
Primary Examiner, Art Unit 1638